LIST OF CONTENTS

JANUARY

Editorial Addresses v

Steroid Nomenclature ix

Review

Gunnar Akner, Ann-Charlotte Wikström and Jan-Åke Gustafsson 1 Subcellular distribution of the glucocorticoid receptor and evidence for its association with microtubules

Minireview

J. O. Johnston, C. L. Wright and G. W. Holbert 17 Enzyme-activated inhibitors of steroidal hydroxylases

Papers

Josie L. Falany, Victor Krasnykh, Galina Mikheeva and Charles N. Falany 35 Isolation and expression of an isoform of rat estrogen sulfotransferase

A. L. Albiston, R. E. Smith and Z. S. Krozowski 45 Changes in the levels of 11β-hydroxysteroid dehydrogenase mRNA over the oestrous cycle in the rat

Hiroshi Yamanishi, Akira Tanaka, Kaoru Miyamoto, Masashi Takeda, Yasuko Nishizawa, Masafumi Koga, Masahiko Miyata and Keishi Matsumoto 49 An essential role of androgen-induced growth factor in glucocorticoid-dependent autocrine loop in Shionogi carcinoma 115 cells

David F. V. Lewis, Malcolm G. Parker and Roger J. B. King 55 Molecular modelling of the human estrogen receptor and ligand interactions based on site-directed mutagenesis and amino acid sequence homology

Chen Si-Feng 67 1α,25 Dihydroxyvitamin D_3 decreased ICAM-1 and ELAM-1 expressions on pulmonary microvascular endothelial cells and neutrophil motivation

Jiang-Liang Zhou and Angela Brodie 71 The effect of aromatase inhibitor 4-hydroxyandrostenedione on steroid receptors in hormone-dependent tissues of the rat

Dao-Wei Zhu, Jiu-Zhen Jin and Sheng-Xiang Lin 77 Human 17β-hydroxysteroid dehydrogenase: optical properties of its complex with $NADP^+$

Esteban A. Vladusic, Omar P. Pignataro, Leonardo E. Bussmann and Eduardo H. Charreau 83 Regulation of the cholesterol ester cycle and progesterone synthesis by juvenile hormone in MA-10 Leydig tumor cells

S. Mortaud, E. Donsez-Darcel, P. L. Roubertoux and H. Degrelle 91 Murine steroid sulfatase (mSTS): purification, characterization and measurement by ELISA

Herman Adlercreutz, Jolande van der Wildt, Judith Kinzel, Hesham Attalla, Kristiina Wähälä, Taru Mäkelä, Tapio Hase and Theodore Fotsis 97 Lignan and isoflavonoid conjugates in human urine

Narender Kumar, Kalyan Sundaram and C. Wayne Bardin 105 Feedback regulation of gonadotropins by androgens in rats: is 5α-reduction involved?

FEBRUARY

Review

Darrell W. Brann, Lawrence B. Hendry and Virendra B. Mahesh 113 Emerging diversities in the mechanism of action of steroid hormones

Papers

Jack E. Bodwell, Jiong-Ming Hu, Eduardo Orti and Allan Munck 135 Hormone-induced hyperphosphorylation of specific phosphorylated sites in the mouse glucocorticoid receptor

Vidya Rajan, Karen E. Chapman, Val Lyons, Pauline Jamieson, John J. Mullins, Christopher R. W. Edwards and Jonathan R. Seckl 141 Cloning, sequencing and tissue-distribution of mouse 11β-hydroxysteroid dehydrogenase-1 cDNA

Peter V. N. Bodine, B. Lawrence Riggs and Thomas C. Spelsberg 149 Regulation of c-*fos* expression and TGF-β production by gonadal and adrenal androgens in normal human osteoblastic cells

Steven F. Arnold, John D. Obourn, Matthew R. Yudt, Timothy H. Carter and Angelo C. Notides 159 *In vivo* and *in vitro* phosphorylation of the human estrogen receptor

Li-ming Sui, Cynthia Wong and Philip H. Petra 173 Over-expression of human sex steroid-binding protein (hSBP/hABP or hSHBG) in insect cells infected with a recombinant baculovirus. Characterization of the recombinant protein and comparison to the plasma protein

Svetlana Lajic, Liv Eidsmo and Mikael Holst 181 Steroid 21-hydroxylase in the kidney: demonstration of levels of messenger RNA which correlate with the level of activity

Yang-Min Ning and Edwin R. Sanchez 187 Stabilization *in vitro* of the untransformed glucocorticoid receptor complex of S49 lymphocytes by the immunophilin ligand FK506

D. W. Killinger, B. J. Strutt, D. A. Roncari and M. W. Khalil 195 Estrone formation from dehydroepiandrosterone in cultured human breast adipose stromal cells

Farjad Ahmed, Ralph A. D. Williams and Kelvin E. Smith 203 Microbial transformation of steroids—IX. Purification of progesterone hydroxylase cytochrome *P*-450 from *Phycomyces blakesleeanus*

MARCH

Ellen Buczko, YoungChul Koh, Yasushi Miyagawa and Maria L. Dufau 209 The rat 17α-hydroxylase-17,20-desmolase (CYP17) active site: computerized homology modeling and site directed mutagenesis

P. H. Provencher, J. Saltis and J. W. Funder 219 Glucocorticoids but not mineralocorticoids modulate endothelin-1 and angiotensin II binding in SHR vascular smooth muscle cells

Tiejun Sun, Ying Zhao, Yasuki Nonaka and Mitsuhiro Okamoto 227 Cloning and expression of cytochrome *P*450(11β) of porcine adrenal cortex

Shuk-Mei Ho and Margaret Yu 233 Hormonal regulation of nuclear type II estrogen binding sites in the dorsolateral prostate of Noble rats

Jianping Gao, Ross W. Lambert, L. Alexandra Wickham, George Banting and David A. Sullivan 239 Androgen control of secretory component mRNA levels in the rat lacrimal gland

Jiří Kraml, Jiřina Kolínská, Libuše Kadlecová, Marie Zákostelecká, Dana Hiršová and Vratislav Schreiber 251 Early and delayed effects of hydrocortisone and onapristone on intestinal brush-border enzymes and their sialylation and on thymus growth in suckling rats

Günter Vollmer, Nicola Ellerbrake, Anne-Christine Hopert, Rudolf Knauthe, Winfried Wünsche and Rudolf Knuppen 259 Extracellular matrix induces hormone responsiveness and differentiation in RUCA-I rat endometrial adenocarcinoma cells

Katja Breskvar, Zdenka Ferenčak and Tamara Hudnik-Plevnik 271 The role of cytochrome $P450_{11\alpha}$ in detoxification of steroids in the filamentous fungus *Rhizopus nigricans*

Maria Cristina Loza 277 Hydrolysis of estrone sulfate in uterine minces of the 6-days pregnant rat

Kyle W. Selcer and Pui-Kai Li 281 Estrogenicity, antiestrogenicity and estrone sulfatase inhibition of estrone-3-amine and estrone-3-thiol

Martti Pulkkinen and Mauri M. Hämäläinen 287 Myometrial estrogen and progesterone receptor binding in pregnancy: inhibition by the detergent action of phospholipids

Book Reviews 295

Announcement I

APRIL

Editorial
Jamshed R. Tata 297 Forward to the past! Or, back to proteins

Papers
Etienne Leygue, Rosita Gol-Winkler, Anne Gompel, Christine Louis-Sylvestre, Laurence Soquet, Sylvain Staub, Frederique Kuttenn and Pierre Mauvais-Jarvis 299 Estradiol stimulates c-*myc* proto-oncogene expression in normal human breast epithelial cells in culture

Mark A. Levy, Martin Brandt, Kristina M. Sheedy, Dennis A. Holt, Julie I. Heaslip, John J. Trill, Paul J. Ryan, René A. Morris, Linda M. Garrison and Derk J. Bergsma 307 Cloning, expression and functional characterization of type 1 and type 2 steroid 5α-reductases from *Cynomolgus* monkey: comparisons with human and rat isoenzymes

Isabelle Audouin-Chevallier, Véronique Pallet, Maryse Coustaut, Serge Alfos, Paul Higueret and Henri Garcin 321 Retinoids modulate the binding capacity of the glucocorticoid receptor and its translocation from cytosol to nucleus in liver cells

Paula Stein, Leonardo E. Bussmann and Marta Tesone 329 *In vivo* regulation of the steroidogenic activity of rat luteal cells by insulin

K. Yang 337 Co-expression of two distinct isoforms of 11β-hydroxysteroid dehydrogenase in the ovine placenta

Mikael Brönnegård, Jörgen Böös, Claude Marcus, Jaquline McGuire, Sigbritt Werner and Jan-Åke Gustafsson 345 Expression of hsp90β messenger ribonucleic acid in patients with familial glucocorticoid resistance—correlation to receptor status

John K. Leighton, Sandra Canning, H. D. Guthrie and James M. Hammond 351 Expression of cytochrome *P*450 1A1, an estrogen hydroxylase, in ovarian granulosa cells is developmentally regulated

J. Hirosumi, O. Nakayama, T. Fagan, K. Sawada, N. Chida, M. Inami, S. Takahashi, H. Kojo, Y. Notsu and M. Okuhara 357 FK143, a novel nonsteroidal inhibitor of steroid 5α-reductase: (1) *in vitro* effects on human and animal prostatic enzymes

J. Hirosumi, O. Nakayama, N. Chida, M. Inami, T. Fagan, K. Sawada, S. Shigematsu, H. Kojo, Y. Notsu and M. Okuhara 365 FK143, a novel nonsteroidal inhibitor of steroid 5α-reductase: (2) *in vivo* effects on rat and dog prostates

H. F. Schteingart, S. B. Meroni, E. H. Pellizzari, A. Loaiza Pérez and S. B. Cigorraga 375 Regulation of Sertoli cell aromatase activity by cell density and prolonged stimulation with FSH, EGF, insulin and IGF-I at different moments of pubertal development

Yoshiyu Takeda, Isamu Miyamori, Takashi Yoneda, Kazuhiro Iki and Ryoyu Takeda 383 Effect of aging on urinary excretion of 19-noraldosterone and 18,19-dihydroxycorticosterone

Book Reviews 387

MAY

Review

Jackie Leach Scully and Uwe Otten 391 Glucocorticoids, neurotrophins and neurodegeneration

Papers

P. A. Baley, K. Yoshida, W. Qian, I. Sehgal and T. C. Thompson 403 Progression to androgen insensitivity in a novel *in vitro* mouse model for prostate cancer

Xinli Yang, Emily C. Dale, Jaime Diaz and G. Shyamala 415 Estrogen dependent expression of heat shock transcription factor: implications for uterine synthesis of heat shock proteins

M. D. Davis, W. B. Butler and S. C. Brooks 421 Induction of tissue plasminogen activator mRNA and activity by structurally altered estrogens

Lars Eikvar, Finn Olav Levy, Haavard Attramadal and Vidar Hansson 431 Modulation of gonadotropic and purinergic responsiveness by islet activating protein in Sertoli cells from immature rats

Brian G. Rowan and Margot M. Ip 437 Identification and localization of steroid-binding and nonsteroid-binding forms of the glucocorticoid receptor in the mouse P1798 lymphosarcoma

G. Chetrite, J. Blumberg-Tick and J. R. Pasqualini 451 Effect of Decapeptyl® (a GnRH analogue) and of transforming growth factor-α (TGF-α), in the presence of heparin, on the sulfatase activity of human breast cancer cells

S. N. Birrell, J. M. Bentel, T. E. Hickey, C. Ricciardelli, M. A. Weger, D. J. Horsfall and W. D. Tilley 459 Androgens induce divergent proliferative responses in human breast cancer cell lines

Charles E. Roselli 469 Subcellular localization and kinetic properties of aromatase activity in rat brain

Mustapha A. Beleh, Young C. Lin and Robert W. Brueggemeier 479 Estrogen metabolism in microsomal, cell, and tissue preparations of kidney and liver from Syrian hamsters

P. E. Lønning, D. C. Johannessen, E. A. Lien, D. Ekse, T. Fotsis and H. Adlercreutz 491 Influence of tamoxifen on sex hormones, gonadotrophins and sex hormone binding globulin in postmenopausal breast cancer patients

James L. O'Conner, Marlene F. Wade, Darrell W. Brann and Virendra B. Mahesh 497 Evidence that progesterone modulates anterior pituitary neuropeptide Y levels during the progesterone-induced gonadotropin surge in the estrogen-primed intact immature female rat

JUNE

Robin E. Dodson, Maria R. Acena and David J. Shapiro — 505 Tissue distribution, hormone regulation and evidence for a human homologue of the estrogen-inducible *Xenopus laevis* vitellogenin mRNA binding protein

Ryou Misao, Yoshihito Nakanishi, Satoshi Ichigo, Masashi Hori, Jiro Fujimoto and Teruhiko Tamaya — 517 Expression of sex hormone-binding globulin mRNA in human endometrial cancers

Mingyi Zhou, Di Xue, Mark F. Foecking and Celso E. Gomez-Sanchez — 523 Stable expression of rat cytochrome P450 11β-hydroxylase (CYP11B1) and aldosterone synthase (CYP11B2) in MA-10 cells

Charles N. Falany, Victor Krasnykh and Josie L. Falany — 529 Bacterial expression and characterization of a cDNA for human liver estrogen sulfotransferase

C. Recchione, E. Venturelli, A. Manzari, A. Cavalleri, A. Martinetti and G. Secreto — 541 Testosterone, dihydrotestosterone and oestradiol levels in postmenopausal breast cancer tissues

Serge Auger, Yves Mérand, Joëlle D. Pelletier, Donald Poirier and Fernand Labrie — 547 Synthesis and biological activities of thioether derivatives related to the anti-estrogens tamoxifen and ICI 164384

Carlos M. Tellería, Carlos O. Stocco and Ricardo P. Deis — 567 Luteolytic action of RU486: modulation of luteal 3β-hydroxysteroid dehydrogenase and 20α-hydroxysteroid dehydrogenase activities in late pregnant rats

C. Larralde, J. Morales, I. Terrazas, T. Govezensky and M. C. Romano — 575 Sex hormone changes induced by the parasite lead to feminization of the male host in murine *Taenia crassiceps* cysticercosis

M. Es-souni Routhier, P. Bournot and L. C. Ramirez — 581 Aldosterone synthase activity in the Y-1 adrenal cell line

S. Shivaji, L. G. Devi, M. B. Ahmad and C. S. Sundaram — 587 ^{31}P NMR study of phosphorus containing metabolites in the uterus of hamster: changes during the estrous cycle and the effect of hormonal manipulation

R. Kovačević, M. Vojinović-Miloradov, I. Teodorović and S. Andrić — 595 Effect of PCBs on androgen production by suspension of adult rat Leydig cells *in vitro*